BIOTECHNOLOGY
SYSTEMS
BRANCH

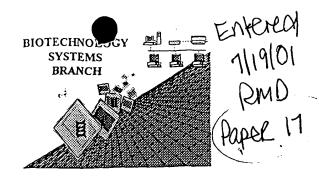Entered
7/19/01
RMD
(Paper 17

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: *09/659,983B*

Source: *O/PE*

Date Processed by STIC: *6/5/2001*

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).
Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/659,983B

DATE: 06/05/2001
TIME: 14:22:06   Does Not Comply
Corrected Diskette Neede

Input Set : A:\PTO.txt
Output Set: C:\CRF3\06052001\I659983B.raw

```
 3 <110> APPLICANT: Meloen, Robert Hans
 4        Oonk, Hendrica Berendina
 6 <120> TITLE OF INVENTION: An Improved Peptide, Immunogenic Composition and Vaccine or
Medical
 7        Preparation, a Method to Immunise Animals Against the Hormone LHRH, and Analogs
 8        of the LHRH Tandem Repeat Peptide and their Use as Vaccine
10 <130> FILE REFERENCE: 2183-4518US
12 <140> CURRENT APPLICATION NUMBER: 09/659,983B
13 <141> CURRENT FILING DATE: 2001-05-12
15 <150> PRIOR APPLICATION NUMBER: US 09/274,048
16 <151> PRIOR FILING DATE: 1999-03-22
18 <150> PRIOR APPLICATION NUMBER: US 08/981,557
19 <151> PRIOR FILING DATE: 1995-06-07
21 <150> PRIOR APPLICATION NUMBER: PCT/NL96/00223
22 <151> PRIOR FILING DATE: 1996-06-06
24 <150> PRIOR APPLICATION NUMBER: US 08/447,298
25 <151> PRIOR FILING DATE: 1995-06-07
27 <150> PRIOR APPLICATION NUMBER: US 08/476,013
28 <151> PRIOR FILING DATE: 1995-06-07
30 <160> NUMBER OF SEQ ID NOS: 13
32 <170> SOFTWARE: PatentIn version 3.0
34 <210> SEQ ID NO: 1
35 <211> LENGTH: 10
36 <212> TYPE: PRT
37 <213> ORGANISM: Sus scrofa
39 <220> FEATURE:
40 <221> NAME/KEY: PEPTIDE
41 <222> LOCATION: (1)..(1)
42 <223> OTHER INFORMATION: X=pyroglutamic acid
45 <220> FEATURE:
46 <221> NAME/KEY: PEPTIDE
47 <222> LOCATION: (10)..(10)
48 <223> OTHER INFORMATION: X=Gly-NH2
51 <400> SEQUENCE: 1
53 Xaa His Trp Ser Tyr Gly Leu Arg Pro Xaa
54 1               5                   10
56 <210> SEQ ID NO: 2
57 <211> LENGTH: 10
58 <212> TYPE: PRT
59 <213> ORGANISM: Homo sapiens
61 <220> FEATURE:
62 <221> NAME/KEY: PEPTIDE
63 <222> LOCATION: (1)..(1)
64 <223> OTHER INFORMATION: X=pyroglutamic acid
67 <220> FEATURE:
68 <221> NAME/KEY: PEPTIDE
69 <222> LOCATION: (10)..(10)
70 <223> OTHER INFORMATION: X=Gly-NH2
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ENTERED

RAW SEQUENCE LISTING   DATE: 06/05/2001
PATENT APPLICATION: US/09/659,983B   TIME: 14:22:06

Input Set : A:\PTO.txt
Output Set: C:\CRF3\06052001\I659983B.raw

```
 73 <400> SEQUENCE: 2
 75 Xaa His Trp Ser His Gly Trp Tyr Pro Xaa
 76 1               5                    10
 78 <210> SEQ ID NO: 3
 79 <211> LENGTH: 20
 80 <212> TYPE: PRT
 81 <213> ORGANISM: artificial
 83 <220> FEATURE:
 84 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against
forms
 85        GnRH/ LHRH
 87 <220> FEATURE:
 88 <221> NAME/KEY: PEPTIDE
 89 <222> LOCATION: (1)..(1)
 90 <223> OTHER INFORMATION: X=pyroglutamic acid or Gln with attached tail of one or more
addi
 91        tional amino acid
 94 <220> FEATURE:
 95 <221> NAME/KEY: PEPTIDE
 96 <222> LOCATION: (3)..(3)
 97 <223> OTHER INFORMATION: X=Trp or N(indole)formyl-tryptophan
100 <220> FEATURE:
101 <221> NAME/KEY: PEPTIDE
102 <222> LOCATION: (11)..(11)
103 <223> OTHER INFORMATION: X=direct bond or a spacer group between Gly at position 10
and Gl
104        n at position 1
107 <220> FEATURE:
108 <221> NAME/KEY: PEPTIDE
109 <222> LOCATION: (13)..(13)
110 <223> OTHER INFORMATION: X=Trp or N(indole)formyl-tryptophan
113 <220> FEATURE:
114 <221> NAME/KEY: PEPTIDE
115 <222> LOCATION: (20)..(20)
116 <223> OTHER INFORMATION: X=Gly-NH2 or Gly with attached tail of one or more amino
acids
119 <220> FEATURE:
120 <221> NAME/KEY: VARIANT
121 <222> LOCATION: (10)..(20)
122 <223> OTHER INFORMATION: variable repeat sequence <>10-20
125 <400> SEQUENCE: 3
127 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Xaa His Xaa Ser Tyr Gly
128 1               5                    10                  15
130 Leu Arg Pro Xaa
131              20
133 <210> SEQ ID NO: 4
134 <211> LENGTH: 21
135 <212> TYPE: PRT
136 <213> ORGANISM: artificial
138 <220> FEATURE:
139 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against
forms
140        GnRH/ LHRH
```

Handwritten annotation: Xaa can only represent a single amino acid, nothing else

142 <220> FEATURE:

Input Set : **A:\PTO.txt**
Output Set: **C:\CRF3\06052001\I659983B.raw**

```
143 <221> NAME/KEY: PEPTIDE
144 <222> LOCATION: (1)..(1)
145 <223> OTHER INFORMATION: X=pyroglutamic acid
148 <220> FEATURE:
149 <221> NAME/KEY: PEPTIDE
150 <222> LOCATION: (6)..(6)
151 <223> OTHER INFORMATION: X=D-Lys
154 <220> FEATURE:
155 <221> NAME/KEY: PEPTIDE
156 <222> LOCATION: (11)..(11)
157 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
160 <220> FEATURE:
161 <221> NAME/KEY: PEPTIDE
162 <222> LOCATION: (16)..(16)
163 <223> OTHER INFORMATION: X=D-Lys
166 <220> FEATURE:
167 <221> NAME/KEY: PEPTIDE
168 <222> LOCATION: (21)..(21)
169 <223> OTHER INFORMATION: X=Cys-NH2
172 <400> SEQUENCE: 4
174 Xaa His Thr Ser Tyr Xaa Leu Arg Pro Gly Xaa His Thr Ser Tyr Xaa
175 1               5                   10                  15
177 Leu Arg Pro Gly Xaa
178                 20
180 <210> SEQ ID NO: 5
181 <211> LENGTH: 21
182 <212> TYPE: PRT
183 <213> ORGANISM: artificial
185 <220> FEATURE:
186 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against
forms
187         GnRH/ LHRH
189 <220> FEATURE:
190 <221> NAME/KEY: PEPTIDE
191 <222> LOCATION: (1)..(1)
192 <223> OTHER INFORMATION: X=pyroglutamic acid
195 <220> FEATURE:
196 <221> NAME/KEY: PEPTIDE
197 <222> LOCATION: (4)..(4)
198 <223> OTHER INFORMATION: X=amino acid substitution
201 <220> FEATURE:
202 <221> NAME/KEY: PEPTIDE
203 <222> LOCATION: (6)..(6)
204 <223> OTHER INFORMATION: X=D-Lys
207 <220> FEATURE:
208 <221> NAME/KEY: PEPTIDE
209 <222> LOCATION: (11)..(11)
210 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
213 <220> FEATURE:
214 <221> NAME/KEY: PEPTIDE
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RAW SEQUENCE LISTING   DATE: 06/05/2001
PATENT APPLICATION: US/09/659,983B   TIME: 14:22:06

          Input Set : A:\PTO.txt
          Output Set: C:\CRF3\06052001\I659983B.raw

     215 <222> LOCATION: (14)..(14)
     216 <223> OTHER INFORMATION: X=amino acid substitution
     219 <220> FEATURE:
     220 <221> NAME/KEY: PEPTIDE
     221 <222> LOCATION: (16)..(16)
     222 <223> OTHER INFORMATION: X=D-Lys
     225 <220> FEATURE:
     226 <221> NAME/KEY: PEPTIDE
     227 <222> LOCATION: (21)..(21)
     228 <223> OTHER INFORMATION: X=Cys-NH2
     231 <400> SEQUENCE: 5
     233 Xaa His Thr Xaa Tyr Xaa Leu Ala Pro Gly Xaa His Thr Xaa Tyr Xaa
     234 1   5   10   15
     236 Leu Arg Pro Gly Xaa
     237   20
     239 <210> SEQ ID NO: 6
     240 <211> LENGTH: 21
     241 <212> TYPE: PRT
     242 <213> ORGANISM: artificial
     244 <220> FEATURE:
     245 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against
forms
     246   GnRH/ LHRH
     248 <220> FEATURE:
     249 <221> NAME/KEY: PEPTIDE
     250 <222> LOCATION: (1)..(1)
     251 <223> OTHER INFORMATION: X=pyroglutamic acid
     254 <220> FEATURE:
     255 <221> NAME/KEY: PEPTIDE
     256 <222> LOCATION: (6)..(6)
     257 <223> OTHER INFORMATION: X=D-Lys
     260 <220> FEATURE:
     261 <221> NAME/KEY: PEPTIDE
     262 <222> LOCATION: (8)..(8)
     263 <223> OTHER INFORMATION: X=amino acid substitution
     266 <220> FEATURE:
     267 <221> NAME/KEY: PEPTIDE
     268 <222> LOCATION: (11)..(11)
     269 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
     272 <220> FEATURE:
     273 <221> NAME/KEY: PEPTIDE
     274 <222> LOCATION: (16)..(16)
     275 <223> OTHER INFORMATION: X=D-Lys
     278 <220> FEATURE:
     279 <221> NAME/KEY: PEPTIDE
     280 <222> LOCATION: (18)..(18)
     281 <223> OTHER INFORMATION: X=amino acid substitution
     284 <220> FEATURE:
     285 <221> NAME/KEY: PEPTIDE
     286 <222> LOCATION: (21)..(21)

Input Set : A:\PTO.txt
Output Set: C:\CRF3\06052001\I659983B.raw

```
287 <223> OTHER INFORMATION: X=Cys-NH2
290 <400> SEQUENCE: 6
292 Xaa His Thr Ser Tyr Xaa Leu Xaa Pro Gly Xaa His Thr Ser Tyr Xaa
293 1               5                   10              15
295 Leu Xaa Pro Gly Xaa
296             20
298 <210> SEQ ID NO: 7
299 <211> LENGTH: 21
300 <212> TYPE: PRT
301 <213> ORGANISM: artificial
303 <220> FEATURE:
304 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against
forms
305       GnRH/ LHRH
307 <220> FEATURE:
308 <221> NAME/KEY: PEPTIDE
309 <222> LOCATION: (1)..(1)
310 <223> OTHER INFORMATION: X=pyroglutamic acid
313 <220> FEATURE:
314 <221> NAME/KEY: PEPTIDE
315 <222> LOCATION: (6)..(6)
316 <223> OTHER INFORMATION: X=D-Lys
319 <220> FEATURE:
320 <221> NAME/KEY: PEPTIDE
321 <222> LOCATION: (10)..(10)
322 <223> OTHER INFORMATION: X=amino acid substutition
325 <220> FEATURE:
326 <221> NAME/KEY: PEPTIDE
327 <222> LOCATION: (11)..(11)
328 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
331 <220> FEATURE:
332 <221> NAME/KEY: PEPTIDE
333 <222> LOCATION: (16)..(16)
334 <223> OTHER INFORMATION: X=amino acid substitution
337 <220> FEATURE:
338 <221> NAME/KEY: PEPTIDE
339 <222> LOCATION: (20)..(20)
340 <223> OTHER INFORMATION: X=amino acid substitution
343 <220> FEATURE:
344 <221> NAME/KEY: PEPTIDE
345 <222> LOCATION: (21)..(21)
346 <223> OTHER INFORMATION: X=Cys-NH2
349 <400> SEQUENCE: 7
351 Xaa His Thr Ser Tyr Xaa Leu Arg Pro Xaa Xaa His Thr Ser Tyr Xaa
352 1               5                   10              15
354 Leu Arg Pro Xaa Xaa
355             20
357 <210> SEQ ID NO: 8
358 <211> LENGTH: 42
359 <212> TYPE: PRT
```

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220> to
<223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY   DATE: 06/05/2001
PATENT APPLICATION: US/09/659,983B   TIME: 14:22:07

Input Set : A:\PTO.txt
Output Set: C:\CRF3\06052001\I659983B.raw

```
L:13  M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:53  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:75  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:81  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:136 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:183 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:242 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:292 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:301 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:360 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:425 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:434 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:475 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:481 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:519 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:522 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:528 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:581 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:587 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:640 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:646 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:690 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
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